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ABSTRACT

Described are procedures used in the location of a sample of individuals not responding to follow-up questionnaires, eleven years after they were originally interviewed in 1960 as 10th graders. The individuals in question were a subset of more than 400,000 9th, 10th, 11th and 12th grade students used in Project TALENT's longitudinal study of the aptitudes, interests, education, and career and life experiences of American youth. Nineteen resources for tracing individuals are listed and the following fourteen described and evaluated in detail: telephone directories: Haines Directory Service: Department of Motor Vehicles: Post Office: TALENT participating schools: Pre-TALENT High Schools: Post-TALENT high schools/colleges: former classmates: marriage bureau records: voter registrars' offices: employers: and birth/death records. Differences between nonrespondents and respondents in terms of academic aptitude and family socioeconomic status, and methods for conducting the follow-up survey by means of regional coordinators and in house staff are also outlined. Success in locating 10th grade nonrespondents is compared to the success with 11th and 12th grade samples. In conclusion, cost effectiveness of the 10th grade survey is discussed in terms of cost per use and cost per successful use of each tracing method. (AEF)

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Project TALENT's Nonrespondent Follow-up Survey: The 10th Grade Special Sample

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TM 810 497

American Institutes for Research
Palo Alto, California
June 1975

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Interim Report

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PROJECT TALENT'S NONRESPONDENT FOLLOW-UP SURVEY: THE 10TH GRADE SPECIAL SAMPLE

INTRODUCTION

Project TALENT is a longitudinal study of American youth, relating their aptitudes, interests, and education to their occupational choices and life experiences. It is being conducted by the American Institutes for Research and is supported by the National Institute of Education. The goal of the project is to collect and analyze information volunteered by the hundreds of thousands of participants in order that education, career, and other related policies may be improved.

In March 1960, more than 400,000 American 9th, 10th, 11th, and 12th grade students participating in Project TALENT were given a two-day battery of paper-and-pencil tests and inventories. Additional data have been collected from this sample through questionnaires sent out at intervals. The TALENT schedule calls for follow-ups approximately 1 year, 5 years, 11 years, and 20 years after each of the four classes graduated from high school. The 1-year and 5-year follow-ups have been completed, and the 11-year follow-up is in its final stage of data collection.

This report describes in detail the procedures and results of Project TALENT's 11-year follow-up of the 10th graders, and in particular, it describes the procedures for locating a sample of individuals who do not respond to questionnaire mailings (the "Special Sample"). Throughout the history of the project, many methods have been tried in an attempt to maximize the usefulness of the follow-up data. The methods used for locating nonrespondents are evaluated in this report, and improvements and innovations are recommended for the future.

During the years of locating and interviewing individuals who had not responded to the mailed questionnaires, the Project TALENT staff has used and refined a number of different resources for tracing and contacting individuals. Nineteen of these resources are listed in this report, and fourteen are described and evaluated in some detail, including a calculation of the cost-effectiveness of each method in terms of the total cost per successful use of the method. This report has great value for other organizations that are attempting to locate and contact samples of individuals

whose current whereabouts are unknown.

TALENT Follow-Up Methods

Each follow-up for a given grade has included four mailings or "waves" of questionnaires, the first wave sent first class, the rest third class. The intervals between the mailings for the 10th grade were 3, 7, and 9 weeks with a reminder card sent between the first and second waves. When a completed questionnaire is returned, cards are punched containing information as to whether or not usable information has been obtained from the participant. These cards are used to control the preparation of mailing labels for the third and fourth waves so that participants do not continue to receive questionnaires after completing one.

The questionnaires returned by the post office because the participant has moved from the address on the mailing label are also processed. If the post office has reported a new address, this change is made on the Project TALENT records and used in the next mailing wave. Questionnaires returned with no new address are coded to show the week received and the reason for the return--such as no forwarding address or addressee unknown. The names of persons who have died are removed from the mailing list, as well as those who no longer wish to participate. Two returns of "addressee unknown" for a participant have also constituted grounds for not sending further questionnaires to the address.

Overall response rates to the four waves of follow-up questionnaires have varied from 61% for 1960 12th graders followed up one year after high school (1961) to 22% for 1960 10th graders followed up eleven years after high school (1974). In general, response rates have been lower during later follow-ups and have fallen off slightly for each successive grade, as shown in Table 1.

TALENT Nonrespondent Surveys

In 1960, Project TALENT tested 5% of all high school students in the United States; these students were selected because they represented all regions of the country and all types of high schools. In the subsequent follow-ups, Project TALENT participants who responded to mailed questionnaires were not representative of the total population. The respondents have come from more affluent backgrounds and scored higher than average

Table 1

Response Rates to Mailed Questionnaires

Follow-up	Grade 12th	11th	10th	9th
1-year				
Number	52,683	43,482	46,321	44,827
Percent	61.1	43.6	42.8	40.0
5-year				
Number	33,340	34,999	34,664	29,827
Percent	39.0	35.1	32.0	26.6
11-year				
Number	24,582	24,868	24,100	In
Percent	28.8	24.9	22.2	Progress
Total number in initial sample	85,498	99,694	108,338	111,928

on tests. Although a study was made of the differences between the respondents and the nonrespondents to the 1-year follow-up, no comparable study was made of the 5-year and 11-year follow-ups. To estimate the respondent bias, the staff of the project have selected approximately 1 in 25 of the nonrespondents and spent a great deal of effort locating and interviewing this "Special Sample."

The method of sample selection for this nonrespondent sample was a simple one, and it guaranteed close-to-maximum representation. The first step in the selection procedure was to arrange all nonrespondents in order by testing number (on the computer tape); this automatically arranged them by geographical region, state, city, and school, and within school generally by classroom. Cases were then selected systematically at regular intervals to give a nonrespondent sample of the desired size. For instance, for a 4% sample, every 25th case was chosen. Those nonrespondents selected for the special sample were located and were contacted directly to secure their answers to the questionnaire items.

Project TALENT has a nationwide network of consultants who, in their capacity as "Regional Coordinators," handled the direct follow-up of those members of the Special Sample of nonrespondents that are in their region;

in this activity the Regional Coordinators operated under instructions received from the central TALENT office. Each Regional Coordinator was sent an interview form for each member of the special nonrespondent sample who was tested in his region of the country. The task of the Regional Coordinators was to locate nonrespondents and collect follow-up data from those within approximately a 100-mile radius. Interviews were generally, but not necessarily, conducted by telephone. A variety of procedures (see list on page 8 of this report) were suggested to the Regional Coordinators for use in locating members of the special sample.

For those cases (in the 11th and 12th grade samples) not located by Regional Coordinators, the names and last known addresses were sent to an external locating organization, which used its resources to locate as many nonrespondents as possible. The external locating organization was not used in the 10th grade 11-year nonrespondent survey because its performance on the previous 11-year follow-ups was evaluated as not cost-effective.

A study has been made by TALENT staff (McLaughlin et al., 1974) to determine if it would be possible to replace the intensive nonrespondent follow-ups (which are quite expensive) with statistical corrections based on differences in the 1960 scores of the respondents and nonrespondents. The conclusion reached was that the intensive nonrespondent follow-up was necessary. Statistical corrections, though reducing bias, did not adequately adjust for differences between nonrespondents and respondents. With the use of the Special Sample, essentially unbiased estimates can be obtained. There may be a small amount of error resulting from the characteristics of nonrespondents who could not be located by any of our procedures; however, the only serious distortion likely to occur is in the case of a category (in a tabulation) containing few students, most of whom are in the special nonrespondent sample.

Differences Between Nonrespondents and Respondents

Based on data from the 1-year follow-up, The American High School Student (Flanagan et al., 1964), pages 10-61 through 10-78, presents a detailed description of differences between nonrespondents and respondents to the 1-year survey. We do not expect that the differences now are of the same magnitude or are exactly the same kind as they were in 1964, but the magnitude of the differences between respondents and non-

respondents such a short time after the original testing should serve as a warning to anyone who would consider conducting a survey without interviewing a proportion of the nonrespondents.

For respondents and nonrespondents, the main differences found by Project TALENT one year after high school were:

1. Respondents were clearly from the higher academic aptitude levels.
2. Respondents represented a smaller proportion of pupils whose fathers held jobs like workman or laborer than of pupils whose fathers held professional or technical jobs (the difference was especially noticeable for women); similarly, more nonrespondents than respondents reported in 1960 that they did not know their father's occupation.
3. The higher the educational level of the pupil's parents, the more likely it was that she or he would respond to the mailed questionnaire.
4. More respondents than nonrespondents majored in mathematics and the sciences; conversely, more nonrespondents than respondents majored in business and commercial subjects.

Unfortunately, there has not yet been funding for a thorough analysis of respondent-nonrespondent differences in the 11-year follow-up survey. We have no reason to expect that as the years have passed the differences have diminished, although the differences have almost certainly changed somewhat in character. We do expect that such an analysis would reveal several different groups of nonrespondents who may be as different from each other as from the respondents. One group does not respond primarily because they are quite mobile and we do not have their current addresses; they never receive our follow-up questionnaire and never have the option of responding. These individuals may well be more affluent and have higher aptitudes than average. Another group may refuse to respond because they believe the government is accumulating too much information already. Others may not respond because they are not academically oriented and do not understand the use of studies like Project TALENT. Probably many do not respond because they view their lives and careers as being unsuccessful, and they do not want to be reminded of their experiences. For Project TALENT to be truly representative of everyone who was in high school in 1960, it is vitally important that we trace a proportion of all the nonrespondents and convince them that we really do need the information only they can give us.

METHODS AND RESULTS OF THE 10TH GRADE SPECIAL SAMPLE

General Description

This section describes the methods used and degree of success obtained in the survey of nonrespondents to the 11-year follow-up questionnaire sent to people who had taken the TALENT tests as 10th graders in 1960. The 10th grade 11-year follow-up questionnaire was mailed beginning in September 1973. The last batch of completed questionnaires was sent to National Computer Systems in February 1975 for scanning and transfer to magnetic tape. The nonrespondent follow-up survey began in mid-April 1974 after the returns were back from the fourth mailing wave and it was possible to determine which TALENT participants had not responded to any of the mailings.

The nonrespondents for the 10th grade Special Sample were selected by a systematic sampling process. The participants who were in the 10th grade in 1960 were listed in order by ID number. The list excluded participants who, on April 3, 1974, were classified as (1) having responded by mail, (2) being deceased, (3) having communicated a strong request not to be contacted, (4) missing all 1960 data, or (5) being in the Knoxville non-probbility sample. To form a sample of approximately 2,500 cases, every 32nd case was chosen for the Special Sample. A total of 2,551 cases were selected in this way.

The Regional Coordinators were assigned 509 of the Special Sample cases. (See discussion of Regional Coordinators, beginning on page 16 of this report.) The other 2,042 cases were assigned directly to an in-house staff of four interviewers who were specially trained for locating and interviewing TALENT nonrespondents.

An unlimited WATS line (telephone) proved to be most efficient for use by in-house staff in conducting phone interviews. (A limited WATS line was installed, but removed after five months.) The principal method used by Regional Coordinators for locating and interviewing was also the telephone. Telephone interviews are far less expensive and time-consuming than personal visits and are preferred by some interviewees who would not want to invite a stranger into their home; however, sometimes Regional Coordinators did make visits to Special Sample members (see pages 17-18). But for most cases, the interviewer read the TALENT 11-year follow-up questionnaire over the phone to the nonrespondent and recorded his/her answers.

In some cases, TALENT located a nonrespondent who had an unlisted telephone number or did not have a phone. For these cases, in-house staff made every attempt to locate a telephone number where the nonrespondent could be reached (using a city directory to find a work phone or a neighbor's phone, for example). If all attempts had been exhausted without success, a letter was sent to the nonrespondent explaining why TALENT was trying to contact him and asking him to call back collect at his convenience. If the nonrespondent did not call after two weeks, another letter was mailed reminding him of what Project TALENT is and that the project was still interested in talking to him. He was given the option of calling back collect or sending Project TALENT a phone number and a convenient time for a TALENT staff member to call. After another two weeks, if there was still no response, a second reminder to call was sent along with the 11-year questionnaire, explaining that all TALENT really wanted was for the nonrespondent to fill out the questionnaire and return it. Three weeks later, if there was still no response, a final letter was sent with another copy of the 11-year questionnaire, asking the nonrespondent either to fill out the questionnaire and return it or notify TALENT staff that he did not wish to participate. This procedure was avoided unless the staff had exhausted every attempt to obtain a telephone number at which the nonrespondent could be reached. Just before the termination of the 10th grade Special Sample data collection, 147 "letters to call" were sent to nonrespondents. Of the 147 letters, 44.2% (65 cases) completed the questionnaire, 3.4% (5 cases) responded that they did not want to fill out the questionnaires, and the remaining 52.4% (77 cases) did not respond at all, and were therefore classified as uncooperative.

In several other situations, staff mailed a questionnaire to a nonrespondent instead of interviewing him by phone. These instances were: (1) when the nonrespondent was in the military and stationed abroad (had an APO address; (2) when the nonrespondent resided in a foreign country; and (3) when the nonrespondent refused to respond over the phone but indicated his willingness to complete the questionnaire if it were mailed to him. At the end of the Special Sample data collection, a total of 44 questionnaires were mailed for one of these three reasons. The completion rate for these cases was 59% (26 cases). The remaining 18 cases did not respond and were classified as uncooperative.

Resources Used by In-House Staff in Locating Nonrespondents for Phone Interviewing

Background data from 1- and 5-year follow-up surveys. To help in locating the 11-year follow-up nonrespondents, the in-house staff had access to 10th grade 5-year follow-up data (collected in 1967), which offered the following information: year married (if before the 1967 follow-up); military status; undergraduate and graduate colleges attended; parents deceased or not; and social security number. Toward the end of the Special Sample data collection, information was also available from the 1-year follow-up conducted in 1963. TALENT did not have have information for all members of the 10th grade Special Sample, only for those who had participated in the 1- and 5-year follow-ups.

Major resources. TALENT in-house staff used the following resources in locating nonrespondents:

1. Local telephone directories
2. Information operators
3. Parents and relatives
4. City directories
5. Haines Directory Service
6. Department of Motor Vehicles
7. Post Office
8. TALENT participating high schools
9. Transfer schools, colleges
10. Former classmates
11. Marriage bureau records
12. Voter registrar's offices
13. Employers
14. Birth/death records
15. Neighbors
16. Wage, tax, or personal property tax bureaus
17. Police records
18. Utility companies
19. Divorce records

For each resource, Table 2 shows the approximate cost per use and per successful use of the method. The final cost is determined by (1) the number of times the method was used, and how many times it proved to be a critical

Table 7

Cost-Effectiveness for Each Method of Locating Nonrespondents: Results from a 25% sample of the 10th Grade Special Sample

Method of Locating	No. of Times Method Used	No. of Cases Using Method Successfully	Percent of Successful Attempts	Outside Costs/Case[a]	Time Spent/Case[b]	In-house Costs/Case[c]	Cost Per Each Use of Method[d]	Cost-Effectiveness[e]
Telephone Directories	725	188	26%	$0	5 min (1/12 hr)	$4.00	$0.33	$1.27
Information Operators	953	273	29%	$0	5 min (1/12 hr)	$4.00	$0.33	$1.14
Parents, Relatives	357	339	95%	$1.00[f]	5 min (1/12 hr)	$4.00	$1.33	$1.40
City Directories	148	66	45%	$1.25[f]	6 min (1/10 hr)	$4.00	$1.65	$3.66
Neighbors	46	13	28%	$1.00[f]	5 min (1/12 hr)	$4.00	$1.33	$4.75
Dept. of Motor Vehicles	119	87	73%	$1.00[g]	15 min (1/4 hr)	$4.50	$2.12	$2.90
Post Office	40	28	70%	$1.10[g]	12 min (1/5 hr)	$4.50	$2.00	$2.85
TALENT High Schools	118	65	55%	$1.10	10 min (1/6 hr)	$4.50	$1.82	$3.30
Transfer Schools, Colleges	45	21	46%	$1.00	6 min (1/10 hr)	$4.00	$1.40	$3.04
Classmates	37	21	58%	$2.50	10 min (1/6 hr)	$4.00	$3.14	$5.41
Marriage Bureaus	71	26	37%	$2.50	20 min (1/3 hr)	$4.50	$3.99	$10.77
Voter Registrar's Offices	24	13	54%	$1.00	5 min (1/12 hr)	$4.00	$1.33	$2.46
Employers	23	13	56%	$1.00	6 min (1/10 hr)	$4.00	$1.40	$2.50
Birth/Death Records	5	0	0%	$1.00	5 min (1/12 hr)	$4.00	$1.33	--
Other (Wage, Tax, Personal Property Tax, Police Records, Utility Company Records, Divorce Records)	26	21	80%	--	--	--	--	--

[a] Agency fees, phone, postage

[b] MT/ST, record-keeping, phone time, thinking time

[c] Salaries, overhead, MT/ST

[d] (time/case) × (in-house costs/hour) + (outside costs/case)

[e] (total cost/use)/(percent of successful attempts)

[f] spent for phone only

[g] spent for fee and postage only

link in completing the case based on a random sample of every fourth case out of 2057 completed cases (508 cases or 24.7%); and (2) cost-per-case including agency fees, phone costs, postage, MT/ST time (for typing letters to possible information sources), approximate cost for man-hours, and overhead.

A discussion of each resource and its major advantages and disadvantages follows.

1. Local telephone directories. Project TALENT has a collection of approximately 350 telephone directories of cities throughout the United States. They are used primarily to check for phone numbers of nonrespondents or their parents. Telephone directories can also be used for checking same last names at a given address and locating potential relatives in small towns.

2. Information operators. Information operators are called when telephone directories are not available for an area and, if necessary, to confirm information found in local directories. A person may be in the general area served by the information operator but may have an unlisted telephone number or a new listing. As a result, the use of information operators frequently enables the project staff to pick up changes of address or confirm addresses.

A common difficulty in using both telephone directories and information operators is that numbers given may be obsolete, disconnected, or just the wrong number.

3. Parents and relatives. Parents of this age group tend to be more settled than their children and consequently are easier to locate. For this reason, they have been one of TALENT's most critical links in locating nonrespondents. There are, however, difficulties with this technique. Some parents are reluctant to divulge information as to the whereabouts of their son or daughter. Others refuse to give any information but offer to contact their son or daughter and have them call TALENT collect. This is undesirable because frequently the son or daughter does not call and the case becomes inactive for a period of time. Occasionally parents provide misleading information which results in a loss of time and money. Lastly, having nonrespondents or parents call TALENT collect is more expensive than for TALENT staff to use the WATS line to call them. TALENT in-house staff tries to discourage parents and nonrespondents from calling back collect whenever possible.

4. City directories. Most libraries and chambers of commerce have city directories; local police stations and real estate firms may also have them.

Some directories list a city's residents alphabetically by address and can be used to find who lives at a given address; others list residents alphabetically by name and can be used to find a more recent address for a TALENT participant. TALENT staff can check directories dating back to 1960 (since the 1960 addresses of TALENT participants are on file at the TALENT office) to pick up the nonrespondent's father's occupation and mother's first name. Information provided usually includes spouse's name, employer, telephone number, and neighbors' names and phone numbers.

The most common problems encountered have been: (1) There are no city directories in the New York City area. (2) Some libraries will not give information over the phone. (3) Smaller libraries may not have current directories or may not have directories at all.

5. Haines Directory Service. Haines Directory Service, located in Lincoln, Nebraska, is a private company that carries current city directories for various cities throughout the United States. For a nominal service charge, Haines will provide the names of current residents and a phone number at a given address, as well as neighbors' addresses and phone numbers. Haines is used primarily for areas in which TALENT does not have access to city directories, such as New York City, Los Angeles, and Chicago.

6. Department of Motor Vehicles. In most states DMV records are public information that is available for a nominal fee. Checking DMV records is often an easy and quick method of locating a nonrespondent, particularly men. Since women change their names, they are more difficult to locate through a DMV unless Project TALENT has a married name for the nonrespondent or knows that she is still single. California and New York are the only states whose DMV maintains records of both maiden and married name if the woman has ever had a driver's license under her maiden name. Florida is the only state which requires a driver's license number to check records, and Washington will not release any information whatsoever.

All DMV requests must be made via letter and require an exact spelling of name and a birthdate. Project TALENT has a file listing all states and their requirements (such as fees, addresses) for making use of DMV records. Common problems include TALENT staff being sent a driver's record for a wrong person or information that is outdated or lacks an issue or expiration date.

7. Post Office. For a fee of $1 postmasters will supply a forwarding address or at least indicate the status of the addressee or address that is

supplied by Project TALENT staff (e.g., party receiving mail at address; addressee unknown; moved--left no forwarding address). If a forwarding address is given, an effective date is sometimes supplied. Forwarding addresses are usually kept on file by the post office for only one year.

Post offices are a fairly effective method of locating nonrespondents as they give new areas in which to search. Project TALENT publishes a yearly newsletter for participants in order to update its address file from post office files. Disadvantages include: some people do not leave a forwarding address with the post office when they move; sometimes the post office sends TALENT an address for the wrong person or the nonrespondent's forwarding address order has expired.

8. TALENT participating schools. Project TALENT participating high schools (the high school at which a nonrespondent took the TALENT tests in 1960) have been a good source of additional information or a source to verify information already obtained from other sources. The nonrespondent may have dropped out of school, graduated, or transferred to another high school. If the participant has transferred to another high school, he or she probably moved to another location which will lead to another area in which to search. Transcripts may have been sent either to employers or to transfer high schools or colleges. Addresses supplied by schools are used to confirm information already available and to obtain a more recent address. If the participant has requested a transcript after graduation, the school may have an address at the time this request was made. Other items of information that can be provided by high schools are father's name and middle initial, father's occupation, mother's first name, participant's place of birth, and names and birthdates of siblings. School records may show parents' names differing from the nonrespondent's last name (i.e., foster parents, stepparents).

A difficulty encountered in contacting schools is that since the enactment of the Buckley Amendment in 1974 many schools will not release any information without written permission of the student. Some schools will send only a copy of the student's academic standing. Sometimes a school may have been closed or consolidated; in these cases it is difficult to find where records are currently located.

9. Pre-TALENT high schools/post-TALENT high schools/colleges. When a TALENT nonrespondent is found to have transferred to the TALENT school from another school and area, information similar to that given by the TALENT schools can be obtained from the school previously attended. An advantage

of contacting the pre-TALENT school is that it can supply additional information--a different address, possible relatives from the area, or confirmation of the information received from the TALENT school. Post-TALENT high schools (i.e., high schools to which the nonrespondent transferred after taking the TALENT tests in 1960) can supply the same information as pre-TALENT high schools, and in addition will have records if the nonrespondent had transcripts sent to employers and/or colleges. Contacting pre-TALENT and post-TALENT high schools in addition to the TALENT high school broadens the area in which TALENT staff can search for the nonrespondent.

Colleges are an excellent first resource in attempting to locate those participants who are known to have attended college. Either the college records office or the alumni office may have a current or reasonably recent address for the subject or for his parents. For subjects with common names in high density population areas, it pays to search school or college records to obtain father's full name, including middle initial. Colleges can often supply a female participant's married name, spouse's name, address upon graduation, a social security number, and information as to whether the nonrespondent had transcripts sent to any graduate schools or employers. The college can also confirm information already available. College alumni offices are a valuable source of information, since they attempt to maintain a current name and address for their college graduates.

Disadvantages include: (1) Many times pre- or post-TALENT high schools and colleges will not release information or have lost a student's records. (2) Some colleges cannot locate records without a social security number.

10. Former Classmates. Many times a classmate (from 1960) will know what happened to a nonrespondent--whether the nonrespondent married; if so, to whom; where he is now living; whether the family moved out of town; if so, to what town; whether he went to college, etc. Classmates can give TALENT the name of the class reunion chairperson, and if the nonrespondent graduated with his class, the reunion chairperson will have records of whether or not the class reunion committee succeeded in locating the nonrespondent.

Disadvantages include: (1) Often the nonrespondent will have moved or have been a quiet type so that classmates will not remember the nonrespondent. (2) Problems arise when trying to locate a nonrespondent who was part of a class of 300 students or more. (3) Fourteen years is a long time, and many students have moved and have not kept in contact with former classmates.

11. Marriage bureau records. In most counties and states marriage bureau records are public information. In addition to county records, most states maintain a central file of all marriage records issued in the state. However, files vary in that some records are kept by groom's name only, some by both bride's and groom's names, some require exact date of marriage, race or approximate location of marriage by county, and some agencies will release no information whatsoever. A Project TALENT marriage record file was established in 1973 and continues to grow as new information is ascertained. This file provides information regarding the accessibility to marriage records throughout the United States and includes the following: (1) area covered (i.e., state, county, city); (2) name of the agency; (3) phone number and/or address; (4) whether information can be obtained by phone or must be obtained by letter; (5) amount of fee, if any; and (6) how records are maintained (e.g., can records be checked if only name of bride is provided).

Marriage bureaus will often provide information such as spouse's name, address and occupation at time of marriage, number of previous marriages, parents' names, occupations, place of birth, and names of witnesses. In-laws and witnesses are often contacted, as are parents.

12. Voter registrar's offices. Voter registrar's offices are a good way of finding a person's address if he is known to be in a certain city. The registrar's office is often able to supply information about occupation or dates last registered to vote.

Most counties maintain both an alphabetic file and a precinct file. The project staff is able to check whether a person is registered to vote in a given area as well as who is registered to vote at a given address. Information supplied includes verification of date of birth, occupation, and frequently spouse's name or names of others at the same address. This is a useful method of locating people with common surnames. To find a married woman, the staff can check the precinct file by address to see whether her husband is registered to vote; if so, his first name can be obtained, making it possible to search further in telephone directories.

Problems encountered include: (1) Sometimes voter registrar's offices are reluctant to divulge information. (2) Agencies vary in how records are maintained (some by address only, some by name only). (3) Many people do not vote.

13. Employers. After obtaining the name of an employer from schools, voter registrar's offices, relatives, or city directories, TALENT staff can

contact the nonrespondent or a relative at his place of employment. If the nonrespondent is no longer employed by a company, the company may still be able to furnish a forwarding address or the name and location of the nonrespondent's new employer.

Difficulties include: (1) Many employers will not release any information without permission of the person TALENT is trying to contact. (2) Many companies do not keep past employees' records for any length of time.

14. Birth/death records. If information has been obtained from schools about the nonrespondent's place of birth, it is possible to find out from birth records the parents' first names, place and date of birth, siblings' names and birthdates, and possibly, a new area in which to search for distant relatives.

When TALENT has obtained information (usually from the high school the nonrespondent attended) that the nonrespondent's parent or relative is deceased, death records may provide useful information. TALENT staff can ask the county to search for a death record of the parent or relative. Death records will have names of survivors and their last known addresses, and this information may lead the staff to the nonrespondent or his relatives.

As can be seen from Table 2, this method was seldom used and did not lead to any completed questionnaires in the 10th grade nonrespondent follow-up.

Regional Coordinators

Use of Regional Coordinators in past follow-up surveys. For the past several years the standard procedure for the conduct of Project TALENT nonrespondent surveys has been to recruit a group of Regional Coordinators located across the United States. For the 10th grade Special Sample, the persons serving as Regional Coordinators included two AIR employees, three professors, one professor's wife, one school teacher, one social worker, one physician/psychologist, and two housewives. The Regional Coordinators were assigned those nonrespondent cases who were tested in an area within a 100-mile radius of the Regional Coordinator's residence. The Regional Coordinators then located and interviewed the nonrespondent cases assigned to them.

This procedure seems to have worked quite well during the 1- and 5-year follow-up surveys when most TALENT subjects, or at least their parents, lived in or near the area where they had lived in 1960. However, based on the comparison of results of the three most recent nonrespondent follow-ups (Table 3), Regional Coordinators were not as effective in the 12th and 11th

Table 3

Comparison of Summary Results for 12th, 11th, and 10th Grade Special Samples

	12th Grade		11th Grade		10th Grade	
	Number	Percent	Number	Percent	Number	Percent
Overall Final Results						
Total Sample	2529	100.0%	2557	100.0%	2551	100.0%
Completed	1719	68.0%	2152	84.2%	2094	82.1%
Uncooperative	167	6.6%	210	8.2%	179	7.0%
Deceased	12	.5%	24	.9%	30	1.2%
Unlocatable	631	24.9%	171	6.7%	248	9.7%
Sent to Regional Coordinators						
Total Sample	2248	100.0%	2097	100.0%	509	100.0%
Completed	1470	65.4%	1045	49.8%	409	80.3%
Uncooperative	135	6.0%	38	1.8%	13	2.6%
Deceased	12	.5%	10	.5%	7	1.4%
Unlocatable	631	28.1%	894	42.6%	54	10.6%
Leads Provided			110	5.2%	26	5.1%
Returned Unlocated by R.C. & Processed by In-house Staff						
Total Sample			894	100.0%	75	100.0%
Completed			630	70.5%	45	60.0%
Uncooperative			118	13.2%	8	10.7%
Deceased			9	1.0%	0	0.0%
Unlocatable			137	15.3%	22	29.3%
Initially Assigned to Retail Credit[a]						
Total Sample	423	100.0%				
Completed	199	47.0%				
Uncooperative	32	7.6%				
Deceased	0	0.0%				
Unlocatable	142	33.6%				
Good Lead	50	11.8%				
Initially Assigned to In-house Staff						
Total Sample			431	100.0%	2042	100.0%
Completed			371	86.1%	1640	80.4%
Uncooperative			34	7.9%	158	7.7%
Deceased			5	1.2%	23	1.1%
Unlocatable			18	4.2%	221	10.8%

[a]For the 12th grade Special Sample only, cases were initially sent to Retail Credit.

grade 11-year follow-up searches. Reasons for the Regional Coordinators' lack of effectiveness in the 11-year follow-up survey seemed to include: (1) the mobility of nonrespondent cases resulting from both their current age and the passage of time; (2) an unwillingness of Regional Coordinators to use state and local agency records, even when informed of their availability; (3) failure on the part of some agencies to honor requests from Regional Coordinators; and most important, (4) the attitude on the part of some Regional Coordinators to "skim the top" by completing only those easy cases for which their compensation per unit of work is high and not bother with the more difficult cases.

Use of Regional Coordinators in the 10th grade 11-year nonrespondent survey. Sixty-three Regional Coordinators were used in the 12th grade nonrespondent survey, and 60 in the 11th grade survey. Because of the relative ineffectiveness of Regional Coordinators in the 12th and 11th grade surveys, only the 11 Regional Coordinators whose completion rates had been better than 75% for the 11th grade survey were asked to serve in the 10th grade survey. All of the Regional Coordinators used in the 10th grade nonrespondent survey thus had two or more years successful experience, and they were able to achieve an overall completion rate of 80.3%. Their high completion rates were very likely due in part to regional differences in mobility rates which affect the ease of locating cases.

Each Regional Coordinator was assigned a certain number of nonrespondent cases who had taken the 1960 TALENT tests in an area within a 100-mile radius of the Regional Coordinator's residence. The total number of cases sent to Regional Coordinators was 509; 80.3% of these were completed by the Regional Coordinators, and those not completed by Regional Coordinators were worked on by Project TALENT in-house staff. The TALENT in-house staff succeeded in completing 60% of the cases which the Regional Coordinators returned incomplete.

Regional Coordinators are paid $10 for each completed questionnaire and $3 for each current address found outside their designated areas. All coordinators are reimbursed for expenses incurred in locating nonrespondents--phone calls, mileage, postage, etc. TALENT's method of paying Regional Coordinators is surely one factor in the tendency of Regional Coordinators to complete only the easy cases. Regional Coordinators are paid ten dollars for each case they complete regardless of how much time it takes to complete the case. Thus, they receive $10 whether it takes them 15 minutes or 5 hours. This is not an incentive to spend much time on difficult-to-locate

cases. Also, if a case is not completed, the Regional Coordinator receives nothing, regardless of the time he or she may have spent.

The Regional Coordinators had access to most of the resources used by the in-house staff. The in-house staff had an advantage over Regional Coordinators in having access to sources such as the TALENT collection of phone books, TALENT's marriage and DMV record files, and information about the nonrespondent from his 1960 test sheet, that were not as readily available to Regional Coordinators in the field. Regional Coordinators had an advantage over in-house staff in contacting nonrespondents who did not have a telephone, in that it was possible for a Regional Coordinator to visit a nonrespondent who lived in his area.

Table 3 shows the effectiveness of Regional Coordinators in locating nonrespondents in the 12th, 11th, and 10th grade Special Samples. Regional Coordinator complete rates varied from 52% to 93.2%.

Success in Locating Nonrespondents

TALENT selected a total of 2,551 nonrespondents to the mailed questionnaire for inclusion in the 10th grade Special Sample. Of these, completed questionnaires were obtained for 82.1%, and additional 7% were located, but were uncooperative, and 1.2% were located but were deceased. Thus, it proved possible to locate 90.3% fo the Special Sample. (See Table 3.)

Regional Coordinators were initially sent questionnaires for 509 persons; they succeeded in locating 84.3% of the cases assigned to them. Eighty cases (15.7% of the cases assigned to Regional Coordinators) were returned to the TALENT office as not located. TALENT in-house staff worked on 75 of these in addition to the cases initially assigned to in-house staff.

A total of 2,042 cases were initially assigned to the in-house staff (i.e., were never assigned to Regional Coordinators); of these, the staff succeeded in locating 89.2%. Of the 80 cases returned by Regional Coordinators, 75 were reassigned to in-house staff. The staff succeeded in locating 53 cases; 45 of these completed the questionnaire and 8 were uncooperative. The cases returned by the Regional Coordinators were among the more difficult-to-locate ones.

See Table 3 for a comparison of the success rates in locating nonrespondents in the 12th, 11th, and 10th grade Special Sample follow-ups.

Cost Effectiveness of the 10th Grade Special Sample

Table 4 shows monthly per-case costs for in-house staff. As can be seen from Table 4, the in-house cost-per-completed case shows a steady increase from the earlier months of the follow-up to the later months. Had the follow-up of the Special Sample ended when originally planned (at the end of October 1974), the overall cost-per-completed case shown would have been less, but with a lower final completion rate. The increase is due to the fact that easier cases were completed first and the more difficult cases were worked on longer. After October 1974, the cases being worked on were those that had proved most difficult to locate. There were relatively few of these cases, but it was decided to continue searching for them in hopes of reducing any bias that might be introduced into the results due to some characteristic of these hard-to-locate individuals. The in-house staff continued to work full time on these few difficult cases although they did not use the unlimited WATS line after October 1974 because it was considered too expensive.

Table 5 compares per-case costs for Regional Coordinators and in-house staff for both the 11th and 10th grade nonrespondent follow-ups. Regional Coordinators worked actively only during the first 2-1/2 months of the 10th grade nonrespondent survey. Consequently, Regional Coordinators' expenses occurred during June, July, and August. As can be seen from Table 5, Regional Coordinators' costs-per-case remained fairly constant from the 11th grade survey to the 10th grade survey. Their completion rates, however, showed a striking improvement from 49.8% in the 11th grade survey to 80.4% in the 10th grade survey (Table 3). The reverse applies to cases initially assigned to in-house staff. A greater number of cases were assinged to in-house staff in the 10th grade survey with the completed case rate remaining fairly constant, but cost-per-case was noticeably decreased. In the 12th and 11th grade surveys, when Regional Coordinators were almost entirely depended on, their completed case rate was poorer, cost-per-case greater, and the cases not located by the Regional Coordinators had to be reassigned to in-house staff, thus increasing in-house cost-per-case.

Table 2 gives a breakdown of the cost per use and cost per successful use of each method used by in-house staff in locating nonrespondents. As can be seen from Table 2, parents/relatives was the method that was most often successful in locating nonrespondents, succeeding 95% of the times

Table 4

Monthly Per Case Costs for In-House Staff: 10th Grade Special Sample

	April 15 - May 30	June	July	August	September	October	November	December	Total
Expenditures	$11,065.00	$9,239.00	$7,344.00	$12,147.00	$8,526.00	$6,569.00	$3,487.00	$5,657.00	$64,032.00
No. Cases Completed	485	283	304	247	152	105	48	30	1,654
Cost/Complete	$22.81	$32.65	$24.16	$49.18	$56.09	$62.56	$72.64	$188.56	$38.71 (avg)
No. Cases Located	513	307	322	268	164	108	52	35	1,769
Cost/Locate	$21.57	$30.09	$22.81	$45.32	$51.99	$60.82	$67.06	$161.62	$36.19 (avg)
No. Cases Processed									2,142
Cost/Processed									$29.89

	April 15 - July 31	August 1 - October 31	November 1 - December 31
Cost/Completed Case	$25.79	$54.05	$117.23
Cost/Located Case	$24.21	$50.45	$105.10

	April 15 - October 1
Cost/Completed Case	$34.83
Cost/Located Case	$32.63

Table 5

Per-Case Costs for Regional Coordinators and In-House Staff:

10th and 11th Grade Special Sample

	Cases Processed By:					
	Regional Coordinators		In-House Staff		Overall	
	10th	11th	10th	11th	10th	11th
Per Completed Case	23.77	23.84	38.71	51.46	35.22	38.07
Per Located Case	22.55	21.83	36.19	44.58	32.03	34.34
Per Case Processed	20.25	11.88	29.89	36.20	28.91	32.04

it was used. Telephone directories and information operators also led to the location of many nonrespondents, but these methods entailed more unsuccessful attempts before a nonrespondent was located. The most cost-effective method (costing the least per sucessful use) was use of information operators.

REFERENCES

Flanagan, J. C., Davis, F. B., Dailey, J. T., Shaycoft, Marion F., Orr, D. B., Goldberg, I., & Neyman, C. A., Jr. *The American High School Student*. Pittsburgh, Pennsylvania: Project TALENT Office, University of Pittsburgh, 1964.

McLaughlin, D. H., Fulscher, G. V., & Yen, W. M. *Project TALENT's Special Sample: Is It Necessary?* Palc Alto, California: American Institutes for Research, 1974.

Doudell, P. 10th Grade Special Sample Survey Procedures. (Instruction booklet used by in-house staff; gives information based on experience with previous TALENT nonrespondent follow-ups)